Dr. D.Y. Patil Vidyapeeth's
Dr. D. Y. Patil Biotechnology and Bioinformatics Institute
Mumbai-Bangalore Express High way, Tathawade, Pune 411033
Mail: info.biotech@dpu.edu.in, **Website:** http://biotech.dpu.edu.in

Dr. Suhasini B

Designation: Assistant Professor

Email ID: suhasini.b@dpu.in

Qualification: PhD (Agriculture)

Area of Specialization: Genetics and Plant breeding

Research Interest: My research area of interest lies in breeding for abiotic stress tolerance and understanding gene expression mechanisms in Rice and Maize. These crops, vital for global food security, face significant yield challenges due to stresses like salinity, drought, and heat. My focus is to identify and leverage stress-responsive genes through molecular breeding and gene expression analysis to enhance tolerance in these crops. By combining traditional breeding methods with advanced molecular techniques, I aim to develop resilient crop varieties that can thrive under adverse environmental conditions, ensuring sustainable agricultural productivity.

EDUCATIONAL QUALIFICATIONS:

1.Doctor of Philosophy (Ph.D.) (Agri-Genetics and Plant breeding) (2022) –Keladi Shivappa Nayaka University of Agriculture and Horticultural Sciences Shivamogga, India.

Thesis Title: Assessment of Genetic and Molecular Diversity of Rice (*Oryza sativa* L.) Genotypes under Drought Conditions.

2.Master of Science (M.Sc.) - (Genetics and Plant breeding)- Tamil Nadu Agricultural University (TNAU) Coimbatore.

3. Bachelor of Science (B.Sc.) – Agriculture from G.K.V.K Bangalore.

ACADEMIC AND RESEARCH EXPERIENCE: 1 year

Dr. D.Y. Patil Vidyapeeth's
Dr. D. Y. Patil Biotechnology and Bioinformatics Institute
Mumbai-Bangalore Express High way, Tathawade, Pune 411033
Mail: info.biotech@dpu.edu.in, **Website:** http://biotech.dpu.edu.in

AWARDS AND ACHIEVEMENTS:

- Qualified ICAR – NET.
- Secured first prize for oral presentation in 4th AGSC Conference organized by TNAU Coimbatore.
- Received student merit scholarship during my Ph.D. tenure (2019 – 2022).
- Qualified Agriculture Research Service mains examination.

SCIENTIFIC COMMITTEE MEMBER: Member of the Committee "International Society of Plant Breeders".

PUBLICATIONS:

1. **Suhaisini, B**., Ravikesavan, R. and Yuvaraja, A., 2016. Genetic variability and correlation among yield and yield contributing traits in sweet corn. *Madras Agricultural Journal*, *103*(oct-dec), p.1.
2. Ravikesavan, R., **Suhasini, B**., Yuvaraja, A. and KumariVinodhana, N., 2020. Assessment of combining ability for yield and yield contributing traits in sweet corn. *Electronic Journal of Plant Breeding*, *11*(01), pp.224-229.
3. **Suhasini, B.,** B.M. Dushyanthakumar, B.N. Harish Babu, 2021.Studies on association of physiological parameters contributing to yield in rice (Oryza sativa L.) under drought stress. Pharma Innovation Journal,10 (12) pp.724-727.
4. **Suhasini, B**., Ravikesavan, R., Yuvaraja, A. and Jency, J.P., 2023. Study on per se performance and heterosis for green cob yield and its attributing traits in sweet corn (zea mays L. saccharata). Plant Archives, 23(2), pp.115-119.
5. **Suhasini, B**., Ravikesavan, R. and Poornima Jency, J., 2023. Molecular breeding strategies for enhancing drought resistance in rice: a review. *Plant Archives* 23 (2) pp 110-114.
6. **Suhasini, B**., Ravikesavan, R. and Yuvaraja, A., 2023. Microsatellite marker based genetic diversity study in sweet corn inbreds (*zea mays* l. saccharata). *Plant Archives*, *23*(2), pp.338-341.
7. Jeeva, G., **Suhasini, B**., Pramitha, L., Jency, J.P., Joshi, P., Ravikesavan, R. and Elango, D., 2024. Unlocking the potential of Kodo millet: reviving an indigenous super grain for tomorrow's nutrition. *Planta*, *259*(6), pp.1-16.

BOOK CHAPTERS:

Techniques in Plant Breeding: From Classical Methods to Genomic Innovations. EPH publisher ISBN: 9789358997835

CONFERENCE PROCEEDINGS:

1. **Suhaisini, B**., Ravikesavan, R. and Yuvaraja, A., 2016. Heterotic potential of sweet corn hybrids for sugar content. *Agriculture Graduate Student Conference*, TNAU India.
2. **Suhasini, B.,** 2022 Agricultural biodiversity and nutrition: Goal to achieve sustainable development. *National Conference on Biodiversity*, KSNUAHS Shivamogga, India.
3. **Suhasini, B.,** Dushyanthakumar B. N., 2022. Investigation on root characteristics associated with

yield and utilization of markers as efficient tools to identify drought tolerant rice genotypes. *Post Graduate conference*, KSNUAHS Shivamogga, India.

4. **Suhaisini, B**., Ravikesavan., 2023. Genetic enhancement of minor millets in genomic and post genomic era: A review. *International Millet Conference*. TNAU Coimbatore, India.
5. **Suhasini B**, Ananya Avasthy, Amol S. Phule, Viranjetha Chinthalu, Minal Wani, Dushyantha Kumar B.M. 2024. A study on correlation between yield and root associated traits under drought condition in rice (Oryza sativa). *International Conference on Advances in Biotechnology and Bioinformatics (ICABB 2024)*. DYPBBI Pune, India.
6. Viranjetha Chinthalu, Riddhi Deka, **Suhasini B**, Ganesh Nawkar, Minal Wani, A B Nadaf 2024. Effect of L-proline treatment on 2 AP and related metabolism in Pandanus amaryllifolius Roxb. *International Conference on Advances in Biotechnology and Bioinformatics (ICABB 2024)*. DYPBBI Pune, India.

CONFERENCES (Abstracts/Oral/Poster):

1. Oral presentation in fourth Agriculture Graduate Student Conference.
2. Poster presentation in International Millet conference 2023
3. Submitted abstract for National Conference on Conservation of Biodiversity
4. Oral presentation in National Post Graduate Conference 2021 .

WORKSHOPS:

1. Attended the online refresher course on "Prequels to plant Breeding by Design and Prediction" organized by GKVK Bangalore.
2. Attended two days workshop on "TA cloning: A simple cloning strategy" in IISER Pune.
3. Attended four day hands -on training workshop on " Cellular and Molecular Biology : From gene cloning to protein expression and cellular localization.

BIOINFORMATICS AND BIOTECHNOLOGY SKILLS:

Plant Breeding Techniques

- Emasculation and hybridization
- Line x Tester (L x T) mating design
- Marker Assisted Selection
- SSR marker Analysis
- Genetic Diversity Analysis